

MNWR

MORBIDITY AND MORTALITY WEEKLY REPORT

Epidemiologic Notes and Reports

- 419 Melioidosis — Pennsylvania
- 430 Follow-up on Guillain-Barré Syndrome
- International Notes
- 420 Terminology of Hepatitis Viruses and Antigens
- Current Trends
- 429 Results of Screening for Gonorrhea — United States, 12-Month period Ending June 30, 1976
- 423 Index

Epidemiologic Notes and Reports

Melioidosis — Pennsylvania

Melioidosis, a disease rare in Americans except in military personnel returning from foreign travel, recently occurred in a 61-year-old American who returned November 7 from a tour of Southeast Asia. The patient exhibited signs of meningoencephalitis, an unusual clinical presentation of melioidosis, and died after an illness of 4 weeks.

The woman, who had been previously healthy, was admitted to a hospital in late November with progressive right-sided weakness. From October 16 through November 7, she had traveled with her husband on a 22-day group tour of Asia. They had visited Tokyo, Kyoto, Taipei, Hong Kong, Bangkok, Singapore, and Bali, staying in modern hotels in these cities. The woman went on a few bus tours into rural areas but had no direct contact with soil or unpurified water. Eight years previously she had traveled to a seacoast resort in Colombia, South America.

On the last day of her recent tour, she complained of tiredness, headache, and feverishness. During the next 2 weeks her malaise remained, and she developed a cough and an intermittent fever as high as 103 F. Three days before admission she consulted a physician for weakness that developed in her right hand and for increasing temperature. Weakness progressed to involve the right arm, leg, and facial muscles, and she was hospitalized.

On admission she was lethargic, and her speech was slurred. She had a right homonymous hemianopsia and was hemiplegic and hemianesthetic on the right. White blood count was 14,200/mm³ with 81% neutrophils, 7% bands, and 12% lymphocytes; ESR was 100 mm/hr. Lumbar puncture yielded clear spinal fluid with an opening pressure of 140 mm H₂O, protein of 22 mg%, and glucose of 72 mg%; cell count revealed 14 lymphocytes and 10 neutrophils/mm³. No organisms were seen on Gram stain, acid fast stain, or India ink preparation of the spinal fluid. Chest X-ray showed a right lower lobe infiltrate. Computerized axial tomography of the brain showed minimal compression of the anterior horn of the left lateral ventricle; brain scan showed increased uptake in the left frontal region. A carotid arteriogram was normal. The clinical diagnosis was meningoencephalitis; multiple cultures were obtained, and

penicillin was given, followed by cephalothin and gentamicin. The patient remained febrile and progressed to develop bilateral pyramidal tract and multifocal brain stem and cranial nerve signs. She died on the eighth hospital day. No pathogens were recovered in cultures of blood or spinal fluid. Gram stain of a transtracheal aspirate showed gram-negative rods which on culture yielded *Klebsiella* species and *Escherichia coli*.

On gross inspection at autopsy, multiple purulent nodules were present bilaterally in the lungs and brain. Multiple small abscesses were seen in the microscopic examination of the spleen, liver, and brain. Abundant gram-negative rods were seen on microscopic sections of the brain. The right occipitoparietal cortex was the site of a large area of hemorrhagic, necrotic parenchyma which on culture yielded *Pseudomonas pseudomallei*.

Reported by P Spilsbury, MD, WB Tyler, MD, WE Parkin, DVM, State Epidemiologist, Pennsylvania Dept of Health; Special Bacteriology Section, Bacteriology Div, Bur of Laboratories; Special Pathogens Br, Bacterial Diseases Div, Bur of Epidemiology, CDC.

Editorial Note: Human melioidosis may be manifested in diverse forms causing localized or systemic infection in an acute or chronic course. Infection may occur through inhalation, ingestion, or through wounds, and in the acute systemic illness it may result in disseminated abscesses involving multiple organ systems. Acute presentation with primary pneumonia or an ulcer with associated lymphadenitis are common. Onset of illness may be delayed by months or even years after the initial infection and may be precipitated by events such as surgery and diabetic ketoacidosis (1). Indolent infection may exist in the form of localized or disseminated granulomas with central necrosis. Commonly, persistent pulmonary infiltrates occur which, when cavity formation exists, may lead to confusion with tuberculosis. Therapy with a combination of tetracycline and chloramphenicol has been recommended (2).

Melioidosis is endemic and enzootic to Southeast Asia, although cases indigenous to Australia, South and Central America, and the Middle East have been reported. The organism has been isolated from soil and water, and infection usually occurs through contact with these, although

Melioidosis — Continued

human-to-human transmission has been reported (3). All but a few cases among residents of the United States have been associated with foreign travel; in recent years, military personnel returning from Southeast Asia have comprised the majority of cases. A 9% rate of subclinical illness has been detected in this group by serosurvey (4).

Physicians treating patients with a history of travel to Southeast Asia as long ago as several years should bear in mind the range of clinical forms of melioidosis.

References

1. Sanford JP, Moore WL Jr: Recrudescence melioidosis: A South-east Asian legacy. *Am Rev Respir Dis* 104:452-453, 1971
2. Eickhoff TC, Bennett JV, Haynes PS, Feeley J: *Pseudomonas pseudomallei*: Susceptibility to chemotherapeutic agents. *J Infect Dis* 121:95-102, 1970
3. McCormick JB, Sexton DJ, McMurray JG, et al: Human-to-human transmission of *Pseudomonas pseudomallei*. *Ann Intern Med* 83:512-513, 1975
4. Clayton AJ, Lisella RS, Martin DG: Melioidosis: A serological survey in military personnel. *Milit Med* 138:24-26, 1973

*International Notes***Terminology of Hepatitis Viruses and Antigens**

Intensive efforts in all parts of the world are leading to a better understanding of the viruses of hepatitis and the antigens associated with them. The World Health Organization Expert Committee on Viral Hepatitis has suggested modifications in nomenclature which take into account recent findings from many laboratories.*

Hepatitis B Virus:

HBV Hepatitis B virus. A 42 nm double-shelled virus, originally known as the Dane particle.

HBsAg Hepatitis B surface antigen. The hepatitis B antigen found on the surface of the virus and

on the accompanying unattached 22 nm spherical particles and the tubular forms.

HBcAg Hepatitis B core antigen. The hepatitis B antigen found within the core of the virus.

HBeAg The e antigen which is closely associated with hepatitis B infection.

Anti-HBs Antibody to hepatitis B surface antigen.

Anti-HBc Antibody to hepatitis B core antigen.

Anti-HBe Antibody to the e antigen.

(Continued on page 429)

*The full report of the Expert Committee on Viral Hepatitis, which took place in Geneva October 11-16, is to be published.

Table I. Summary—Cases of Specified Notifiable Diseases: United States

(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	52nd WEEK ENDING		MEDIAN 1971-1975	CUMULATIVE, FIRST 52 WEEKS		
	January 1, 1977	December 27, 1975		January 1, 1977	December 27, 1975	MEDIAN 1971-1975
Aseptic meningitis	45	30	65	3,210	4,088	4,281
Brucellosis	6	6	11	282	263	193
Chickenpox	3,523	3,160	---	177,581	143,096	---
Diphtheria	2	—	6	146	277	224
Encephalitis	Primary	8	54	1,359	2,633	1,525
	Post-Infectious	2	4	257	301	280
Hepatitis, Viral	Type B	271	187	14,682	11,877	8,879
	Type A	546	492	32,901	34,599	52,091
	Type unspecified	138	121	8,362	8,340	---
Malaria	6	2	5	451	415	415
Measles (rubeola)	571	222	242	39,585	24,072	26,718
Meningococcal infections, total	41	16	19	1,534	1,414	1,355
Civilian	41	15	18	1,522	1,385	1,334
Military	—	1	—	12	29	29
Mumps	330	993	1,056	37,743	58,406	69,456
Pertussis	15	22	---	927	1,565	---
Rubella (German measles)	115	114	126	12,090	16,210	25,169
Tetanus	1	—	4	68	93	96
Tuberculosis	591	537	---	32,549	33,003	---
Tularemia	4	4	3	146	116	147
Typhoid fever	4	10	7	384	375	416
Typhus, tick-borne (Rky. Mt. spotted fever)	5	2	2	892	811	638
Venereal Diseases:						
Gonorrhea						
Civilian	13,386	14,542	---	996,468	992,483	---
Military	267	402	---	28,642	28,637	---
Syphilis, primary and secondary						
Civilian	307	292	---	23,499	25,392	---
Military	6	2	---	340	344	---
Rabies in animals	39	33	49	2,887	2,351	3,301

Table II. Notifiable Diseases of Low Frequency: United States

	CUM.		CUM.
Anthrax:	2	Poliomyelitis, total:	9
Botulism: Calif. 1	29	Paralytic:	8
Congenital rubella syndrome: *Calif. 2	27	Psittacosis: *Mass. 1	71
Leprosy: Tex. 1, Calif. 1, Hawaii 3	134	Rabies in man:	2
Leptospirosis: Fla. 1, Ala. 2, La. 1, Calif. 1	48	Trichinosis: *Mass. 5	89
Plague:	15	Typhus, murine:	50

*Delayed Reports: Cong. Rub. Syn. Wisc. 1; Psittacosis: Fla. 3; Trichinosis: Pa. 6

Table III
Cases of Specified Notifiable Diseases: United States
Weeks Ending January 1, 1977 and December 27, 1975 — 52nd Week

AREA REPORTING	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod- borne and Unspecified		Post In- fectious	Type B	Type A	Type Unspecified		
	1976	1976	1976	1976	CUM. 1976	1976	1975	1976	1976	1976	1976	1976	CUM. 1976
UNITED STATES	45	6	3,523	2	146	8	54	2	271	546	138	6	451
NEW ENGLAND	1	-	262	-	-	1	1	-	2	11	10	1	22
Maine	-	-	7	-	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	1	-	-	-	-	-	-	1	-	-	-
Vermont	-	-	19	-	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	121	-	-	-	1	-	1	5	9	1	12
Rhode Island	1	-	42	-	-	-	-	-	-	2	-	-	4
Connecticut	-	-	72	-	-	1	-	-	1	3	1	-	6
MIDDLE ATLANTIC	12	-	451	-	-	-	6	-	91	78	41	1	104
Upstate New York	9	-	416	-	-	-	1	-	27	25	20	-	23
New York City	-	-	33	-	-	-	-	-	22	13	-	1	44
New Jersey	3	-	NN	-	-	-	-	-	13	17	15	-	15
Pennsylvania*	-	-	2	-	-	-	5	-	29	23	6	-	22
EAST NORTH CENTRAL ..	1	1	1,660	-	2	1	24	-	42	65	6	-	23
Ohio	-	-	140	-	1	-	13	-	8	15	-	-	7
Indiana	-	-	158	-	-	-	-	-	1	2	5	-	-
Illinois	-	-	208	-	-	-	-	-	11	13	-	-	5
Michigan	-	-	838	-	-	1	11	-	15	32	1	-	9
Wisconsin*	1	1	316	-	1	-	-	-	7	3	-	-	2
WEST NORTH CENTRAL ..	8	-	214	-	4	-	13	-	9	36	5	-	27
Minnesota	1	-	-	-	-	-	-	-	5	14	-	-	4
Iowa	-	-	43	-	-	-	-	-	-	2	2	-	-
Missouri*	7	-	-	-	1	-	13	-	2	8	3	-	9
North Dakota	-	-	16	-	-	-	-	-	-	3	-	-	1
South Dakota	-	-	-	-	3	-	-	-	-	-	-	-	3
Nebraska	-	-	5	-	-	-	-	-	1	1	-	-	5
Kansas	-	-	150	-	-	-	-	-	1	8	-	-	5
SOUTH ATLANTIC	3	-	283	-	1	2	-	-	27	77	15	1	68
Delaware	-	-	8	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	5	-	-	1	-	-	11	4	2	1	13
District of Columbia ..	-	-	1	-	-	-	-	-	-	1	-	-	9
Virginia	2	-	35	-	-	1	-	-	2	1	4	-	10
West Virginia	-	-	162	-	1	-	-	-	-	9	-	-	3
North Carolina	1	-	NN	-	-	-	-	-	8	4	1	-	6
South Carolina	-	-	16	-	-	-	-	-	-	1	1	-	1
Georgia	-	-	-	-	-	-	-	-	-	28	-	-	5
Florida*	-	-	56	-	-	-	-	-	6	29	7	-	21
EAST SOUTH CENTRAL ..	2	2	170	-	-	1	3	1	15	31	-	-	5
Kentucky	-	-	89	-	-	-	-	-	-	-	-	-	1
Tennessee	-	1	NN	-	-	1	-	-	4	13	-	-	-
Alabama	2	1	80	-	-	-	3	1	10	5	-	-	2
Mississippi	-	-	1	-	-	-	-	-	1	13	-	-	2
WEST SOUTH CENTRAL ..	4	1	134	-	1	-	3	1	7	36	10	-	21
Arkansas	-	1	-	-	-	-	-	-	-	5	2	-	2
Louisiana	1	-	NN	-	-	-	-	-	2	6	-	-	2
Oklahoma*	1	-	1	-	-	-	-	-	1	10	3	-	3
Texas	2	-	133	-	1	-	3	1	4	15	5	-	14
MOUNTAIN	1	2	105	-	6	-	-	-	9	40	18	-	17
Montana	-	-	13	-	-	-	-	-	-	2	2	-	-
Idaho	-	-	18	-	-	-	-	-	-	6	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	1	2	71	-	3	-	-	-	5	14	8	-	10
New Mexico	-	-	-	-	2	-	-	-	2	8	-	-	1
Arizona*	-	-	NN	-	1	-	-	-	-	3	3	-	5
Utah	-	-	3	-	-	-	-	-	2	7	5	-	-
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	1
PACIFIC	13	-	244	2	132	3	4	-	69	172	33	3	164
Washington	-	-	226	2	124	-	-	-	5	7	5	-	4
Oregon	-	-	1	-	-	-	1	-	9	13	1	-	8
California*	13	-	-	-	1	3	2	-	51	73	25	3	150
Alaska*	-	-	6	-	6	-	-	-	1	76	1	-	-
Hawaii	-	-	11	-	1	-	1	-	3	3	1	-	2
Guam*	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	5	-	1	-	-	-	-	2	-	-	1
Virgin Islands	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-

NA: Not available

NN: Not notifiable

*Delayed reports: Aseptic Meningitis: Wisc. add 1, Mo. add 1, Fla. delete 1; Chickenpox: Calif. add 2, Guam add 2; Encephalitis, post: Fla. delete 1; Hepatitis B: Fla. delete 2; Hepatitis A: Fla. delete 1, Okla. add 1, Ariz. delete 1, Alas. add 304; Hepatitis, unspecified: Mo. add 1, Okla. delete 1; Malaria: Pa. add 1

Table III-Continued
Cases of Specified Notifiable Diseases: United States
Weeks Ending January 1, 1977 and December 27, 1975 - 52nd Week

REPORTING AREA	MEASLES (Rubella)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1976	CUMULATIVE		1976	CUMULATIVE		1976	CUM. 1976	1976	1976	CUM. 1976	CUM. 1976
		1976	1975		1976	1975						
UNITED STATES	571	39,585	24,072	41	1,534	1,414	330	37,743	15	115	12,090	68
NEW ENGLAND	27	531	357	-	73	81	20	1,639	-	12	360	2
Maine	-	10	16	-	1	7	-	128	-	1	16	-
New Hampshire	-	9	23	-	5	4	-	29	-	-	12	-
Vermont	25	169	75	-	6	2	-	48	-	-	6	-
Massachusetts	-	40	111	-	24	28	-	184	-	9	186	1
Rhode Island	-	15	3	-	8	7	3	505	-	-	7	-
Connecticut	2	288	129	-	29	33	17	745	-	2	133	1
MIDDLE ATLANTIC	93	7,507	2,324	8	231	144	42	3,380	8	13	2,369	10
Upstate New York	24	2,996	1,056	5	91	47	22	457	6	7	634	4
New York City	4	497	168	-	55	36	6	1,741	1	3	158	4
New Jersey*	-	624	479	3	38	22	11	575	-	-	1,357	-
Pennsylvania	65	3,390	621	-	47	39	3	607	1	3	220	2
EAST NORTH CENTRAL ..	327	17,435	7,243	-	181	205	138	15,475	1	74	4,699	5
Ohio	-	626	107	-	68	69	12	2,198	-	8	398	2
Indiana	191	4,491	548	-	16	10	15	1,607	-	39	1,046	-
Illinois	63	2,032	1,865	-	20	27	22	1,964	1	5	1,235	-
Michigan	29	6,139	3,219	-	65	76	62	5,507	-	13	1,513	3
Wisconsin	44	4,147	1,504	-	12	23	27	4,199	-	9	507	-
WEST NORTH CENTRAL ..	38	1,506	5,157	2	92	95	40	4,027	-	2	456	7
Minnesota	-	430	231	-	12	20	-	551	-	-	32	2
Iowa*	1	38	693	-	10	9	12	1,615	-	1	89	-
Missouri*	1	230	271	1	44	49	-	421	-	-	46	2
North Dakota	-	3	1,063	-	3	2	-	128	-	-	3	1
South Dakota	1	5	356	-	3	1	-	11	-	-	21	1
Nebraska	-	55	396	-	5	3	-	115	-	-	3	-
Kansas	35	745	2,147	1	15	11	28	1,186	-	1	262	1
SOUTH ATLANTIC	7	2,272	509	6	300	279	16	2,784	1	2	1,336	12
Delaware	-	131	35	-	9	8	5	83	-	-	36	-
Maryland	-	715	64	-	26	35	3	718	-	-	3	4
District of Columbia ..	-	13	1	2	8	5	-	108	-	-	46	-
Virginia	5	850	40	-	35	21	-	225	-	1	249	1
West Virginia	2	214	222	-	8	5	2	857	1	1	323	-
North Carolina	-	18	2	1	55	53	1	389	-	-	18	-
South Carolina	-	4	-	-	36	40	-	46	-	-	599	1
Georgia	-	4	40	2	35	18	-	3	-	-	2	-
Florida*	-	323	105	1	88	94	5	355	-	-	60	6
EAST SOUTH CENTRAL ..	21	992	377	2	143	186	31	3,155	-	5	436	10
Kentucky	-	760	158	-	24	77	2	989	-	-	193	2
Tennessee	21	215	178	1	65	62	5	1,715	-	5	230	6
Alabama	-	-	5	-	39	33	24	389	-	-	2	2
Mississippi	-	17	36	1	15	14	-	62	-	-	11	-
WEST SOUTH CENTRAL ..	6	905	547	7	229	217	10	2,745	1	1	632	12
Arkansas	-	19	-	1	15	14	-	81	1	-	190	1
Louisiana	3	311	2	4	48	41	1	36	-	-	92	2
Oklahoma	-	308	269	1	26	15	1	873	-	1	84	-
Texas	3	267	276	1	140	147	8	1,755	-	-	266	9
MOUNTAIN	20	5,529	1,777	6	53	43	2	1,255	-	-	504	2
Montana	18	492	50	-	6	9	-	27	-	-	237	-
Idaho	-	2,024	73	1	8	6	-	478	-	-	18	-
Wyoming	-	4	3	-	-	1	-	1	-	-	2	-
Colorado	-	451	1,170	3	15	11	2	282	-	-	31	-
New Mexico	-	16	16	-	4	4	-	128	-	-	31	-
Arizona	-	236	83	-	10	3	-	-	-	-	-	2
Utah	2	2,239	354	1	7	8	-	221	-	-	165	-
Nevada	-	67	28	1	3	1	-	118	-	-	20	-
PACIFIC	32	2,908	5,781	10	232	164	31	3,283	4	6	1,298	8
Washington	2	364	300	1	37	23	14	943	-	2	239	1
Oregon	-	175	199	1	21	12	3	422	-	-	141	1
California	30	2,352	5,217	7	147	118	14	1,838	4	4	895	6
Alaska	-	11	-	1	24	9	-	38	-	-	3	-
Hawaii	-	6	65	-	3	2	-	42	-	-	20	-
Guam*	-	16	39	-	1	3	-	24	-	-	6	-
Puerto Rico	3	493	744	-	4	1	3	777	-	1	15	7
Virgin Islands	NA	17	8	-	2	-	NA	61	NA	NA	12	2

NA: Not available

*Delayed reports: Measles: N.J. add 3, Iowa add 60; Men. Inf.: Mo. delete 1, Fla. delete 1; Mumps: Guam add 2; Rubella: N.J. add 6

INDEX — Volume 25, 1976

Numbers in bold face are errata. Each issue (number) of Volume 25 of the Morbidity and Mortality Weekly Report contains the following pages, inclusive.

<i>Issue</i>	<i>Pages</i>	<i>Issue</i>	<i>Pages</i>	<i>Issue</i>	<i>Pages</i>	<i>Issue</i>	<i>Pages</i>	<i>Issue</i>	<i>Pages</i>	<i>Issue</i>	<i>Pages</i>
1	1-8	10	77-84	19	149-156	28	221-228	37	293-300	46	369-376
2	9-16	11	85-92	20	157-164	29	229-236	38	301-308	47	377-384
3	17-24	12	93-100	21	165-172	30	237-244	39	309-316	48	385-392
4	25-32	13	101-108	22	173-180	31	245-252	40	317-324	49	393-400
5	33-40	14	109-116	23	181-188	32	253-260	41	325-332	50	401-402
6	41-48	15	117-124	24	189-196	33	261-268	42	333-340	51	403-418
7	49-56	16	125-132	25	197-204*	34	269-276	43	341-348	52	419-430
8	57-64	17	133-140*	26	205-212	35	277-284	44	349-356		
9	65-76	18	141-148	27	213-220	36	285-292	45	357-368		

* Listing of supplements to the MMWR:

Perspectives on the control of viral hepatitis, type B. 7 May 1976. Issued as supplement to no. 17

Bicentennial issue. 2 Jul 1976. Issued as enclosure with no. 25

Health Information for International Travel, 1976. Issued October 1976

Reported Morbidity and Mortality in the United States, 1976. Annual Supplement Summary, to be published in mid-1977 as no. 53

Abortion: comparative risks of 3 methods of midtrimester 370; in the United States in 1975, 179

ACIP Recommendations: on immunization, general, 349, influenza vaccine 165, 221, 285, 357, measles vaccine 359, 376, rabies 403, smallpox vaccination of hospital and health personnel 9

African hemorrhagic fever: photograph of 339; in southern Sudan and northern Zaire 324, 339, 342, 378, the United Kingdom 378

Aircraft: staphylococcal food poisoning aboard 317

Amebiasis: in the United Kingdom 118

American Legion: associated with Philadelphia respiratory disease 244, 251, 252, 259, 267, 270, 284, 308

Angiosarcoma of the liver: associated with arsenic, vinyl chloride, and thorium dioxide 58, farm residence 58, occupation 58; in Wisconsin 57

Anthrax: in a home craftsman 33, animals 293; inhalation 33; in California 33, Texas 293

Arboviral infections: in the United States in 1975, 116

Armadillos: and leprosy-like disease 18

ASL: See **Angiosarcoma of the liver**

Atypical measles: history of 246, 268, in California 1974-1975, 245, 268

Azide hazard: associated with automatic blood cell counters 268

Bacteremia: associated with a pediatric hospital 109, 132, IV fluid 110, 132; caused by *Clostridium septicum* 244, *Enterobacter aerogenes* 109, 132; in Illinois 109, 132, the United Kingdom 244

Bactrim: vs. pentamidine as treatment for *Pneumocystis pneumonia* 365

Bicentennial issue: supplement to No. 25

Blastomycosis: associated with peanut farms 205, 260; in North Carolina 205, 260

Botulism: associated with cheese spread 187, commercial cherry peppers 134, 148, home-canned lamprey 150, honey 269, salmon eggs 399; caused by Type A toxin 150, 269, 399, type B toxin 269; possible germination and toxin production *in vivo* 269; in infants 269; in Alaska 399, California 269, New Jersey 269, Oklahoma 134, 148, Utah 134, Texas 134, Washington 150, the United States in 1975, 75, Argentina 187

Brucellosis: in the United States in 1975, 299

Burkitt's lymphoma: in Virginia 173

California encephalitis: in the United States in 1975, 116

Cambodian refugees: and malaria 125; health status of 375

Chancroid: outbreak in Manitoba 148

Cheese: associated with botulism 187, salmonellosis 259

Cherry peppers: associated with botulism 134

Chickenpox: in Newfoundland in 1976, 417

Chlordane: contamination of a municipal water system 117

Cholera: caused by *Escherichia coli* 139; in American tourists 415; in Georgia 139, Hong Kong 415, worldwide in 1975, 213. See also **Vaccination certificate requirements**

Cigarette smoking: in the United States in 1975, 237, 252

Ciguatera fish poisoning: in Midway Atoll 219

Consumer Product Safety Commission: and recommendations for disposal of yarn contaminated with anthrax 33, 34

Contagious ecthyma: in Pennsylvania 283

Copper poisoning: Environmental Protection Agency's recommendation on definition of 42; from an orange drink machine 42; in Louisiana 42

Coxsackievirus infection: in New York 377

Creative Handweavers: associated with anthrax contaminated yarn 33

Cruise ship: diarrheal illness aboard 229, 309; *M/S Sun Viking* 309, 324; *S/S Emerald Seas* 229

Dengue: caused by type 2, 7, 65; hemorrhagic fever 7, 65; shock syndrome 7; in Puerto Rico 7, 65

Diarrheal illness: aboard a cruise ship 229, 309; associated with Bicentennial 251, cruise ship water system 229, 309, deficiencies in cruise ship foodhandling practices 229, well water at campgrounds 251; caused by *Clostridium perfringens* 198, enterotoxigenic *Escherichia coli* 229, *Salmonella senftenberg* 229; in bicyclists 251; in Idaho 251, Montana 251, Wisconsin 198

DEV: See ACIP Recommendations

D&E: See Dilation and evacuation

Dilation and evacuation: and associated risks during midtrimester abortion 370, 375

Diphtheria: in Canada 355

Dreher Pickle Company: and recall of cherry peppers associated with botulism 134, 148

Drug Service: See Parasitic Disease Drug Service

Eastern equine encephalitis: in Delaware 116, Florida 116, Massachusetts 116, Virginia 116, the United States in 1975, 116

Echo 9 infection: in New York 32

Encephalitis: See California encephalitis, Eastern equine encephalitis, St. Louis encephalitis, Western equine encephalitis

Endophthalmitis: associated with implantation of intra-ocular lens prosthesis 369, 400; caused by *Pseudomonas aeruginosa* 369, 400; in California 369, Minnesota 369, 400

Equation: for determining influenza epidemic activity 391

Eyeworm infestation: in a human 367; in California 367

Gastrointestinal illness (agent unspecified): aboard a cruise ship 309, 324; associated with water 309, 324

Giardiasis: in northern Canada 307

Gonorrhea: CDC recommended treatment for uncomplicated 307; penicillinase-producing 261, 307; in Arkansas 307, California 261, 307, Iowa 307, Maryland 261, 307, New York 307, Rhode Island 307, Virginia 307, the United States in 3-month period ending September 30, 1975, 91, 12-month period ending June 30, 1976, 429, England 307

Ground beef: associated with trichinosis 393

Guillain-Barré syndrome: associated with influenza vaccine 401, 416, 430; in the United States 401, 416, 430

Gulf South Research Institute: and leprosy in armadillos 18

Haemophilus influenzae infection: chloramphenicol-resistant 267, 385; in Connecticut 267, Massachusetts 267, Pennsylvania 285, the United Kingdom in the first 26 weeks of 1975, 174, 252

Helminths: in the United Kingdom 118

Hemorrhagic fever: in Africa 324, 339, 342, 378. See also Dengue

Hepatitis: nomenclature for 420. See also Listing of supplements to the MMWR

Hyperpyrexia: in nursing home 276; in Florida 276

Hypertonic saline: and associated risks during midtrimester abortion 370, 375

Imported infections: in the United Kingdom and Wales in 1975, 118

Immunization: for travelers to earthquake-affected areas in Italy 142; program for influenza in Wyoming 375. See also ACIP Recommendations and Influenza immunization program

Indo-Chinese refugees: and *Pneumocystis carinii* pneumonia 15, tuberculosis 139; health status of 375

Influenza: activity according to CDC telephone survey 55, 63, 73, 78, 92, 99, 108; and swine-like virus 47, 55, 63, 92, 165, 221, 267, 285, 292, 331, 357, 376, 392, 394, 401, 402, 406, 430; assessment data 347, 366, 375, 383, 394, 399; mortality due to pneumonia-influenza, charts of 26, 47, 63, 73, 74, 92, 124, 391; surveillance 308, 391; type A 15, 23, 25, 39, 40, 47, 55, 63, 73, 92, 189, 220, 230, 252, 267, 285, 315, 366, 383, 392, 394, 402, 406; type B 23, 40, 55, 63, 220, 230, 252, 267, 331, 347, 366, 383, 392, 394, 399, 406; vaccine 165, 221, 285, 331, 347, 357, 366, 375, 399, 401; in Alabama 267, Alaska 406, Arizona 23, Arkansas 47, California 15, 366, 394, 399, Colorado 40, 220, Connecticut 25, District of Columbia 47, 63, 73, 78, 392, Georgia 40, Guam 315, 331, Hawaii 40, Iowa 23, Illinois 25, Massachusetts 23, 25, Michigan 40, 267, 406, Minnesota 15, 23, 47, 55, Mississippi 47, 55, 63, 220, Missouri 25, 376, 383, Montana 267, Nebraska 40, New Jersey 23, 47, 48, 55, 63, 92, 220, New York 23, Nevada 40, North Carolina 406, Ohio 267, Oregon 15, 40, 267, Pennsylvania 92, 220, 252, 406, Puerto Rico 63, 73, 78, 92, 99, 108, South Carolina 252, 347, 406, Tennessee 40, 55, 406, Texas 40, 99, 100, 399, 406, Utah 267, Virginia 63, Washington 23, Wisconsin 47, 55, 267, 392, 394, 402, 406, the United States 23, 25, 40, 47, 55, 63, 73, 78, 92, 99, 108, 124, 190, 220, 230, 252, 267, 292, 315, 331, 366, 383, 406, Argentina 230, 252, Australia 230, 252, 267, Austria 230, Belgium 230, Canada 63, 406, Czechoslovakia 230, Denmark 63, England 366, Finland 39, France 63, 230, French Guiana 63, Germany 230, Greece 230, Hong Kong 39, 291, Hungary 63, India 230, Kenya 230, Jamaica 63, 383, Korea 63, Malaysia 267, Morocco 230, Netherlands 63, 230, 252, New Zealand 230, Poland 230, Portugal 230, Scotland 252, South Africa 23, 230, Spain 63, 230, Senegal 230, Singapore 230, Sri Lanka 230, Sweden 63, Switzerland 63, Thailand 252, 394, the United Kingdom 23, 63, Uruguay 230, Union of Soviet Socialist Republics 39, worldwide 23, 39, 63, 189, 220, 230, 252, 291, 308, 331, 366, 383, 394, 406. See also Influenza immunization program

Influenza immunization program: and Guillain-Barré syndrome 401, 406, 430; in Alaska 399, Minnesota 399, Missouri 399, North Dakota 399, Puerto Rico 399, South Dakota 399, Utah 399, Wyoming 375, the United States 347, 366, 375, 383, 394, 399, 401, Trust Territory of the Pacific Islands 399

Insecticide: associated with contamination of municipal water system 117

Intraamniotic prostaglandin F_{2α}: and associated risks during midtrimester abortion 370, 375

Lassa fever: associated with Peace Corps volunteer 64, 66, 83, 91; in District of Columbia 64, 66, 83, 86, Africa 64

Lead poisoning: associated with parents' work clothing 85; in children living near a lead smelter 1, 85; surveillance of childhood, 1st quarter FY 1976, 66, 2nd quarter FY 1976, 142, 143, 3rd quarter FY 1976, 195, 4th quarter FY 1976, 318; in Idaho 1, 66, Tennessee 85, Utah 181

Legionnaire's disease: in Pennsylvania 244, 251, 252, 259, 267, 270, 284, 308

Lenses: associated with endophthalmitis 369

Leprosy: associated with wild-caught armadillos 18; in Louisiana 18, Puerto Rico 163, United States 163

Leptospirosis: and initial diagnoses of aseptic meningitis 18, routine screenings of serum specimens for arboviral serology 18; associated with raccoons 18, swimming in creek 84; caused by *Leptospira canicola* 18, *L. interrogans*, serotype *grippotyphosa*, first reported outbreak in the United States 84, *L. pomona* 18; in Florida 17, Tennessee 84

Leukemia: acute childhood 77; in Ohio 77

M/S Sun Viking: gastrointestinal illness aboard 309, 324

Malaria: caused by *Plasmodium falciparum* 125, 140, 325, *P. malariae* 125, 325, *P. ovale* 325, *P. vivax* 140, 325; fatal 125; in Ethiopian immigrant with louse-borne relapsing fever 206, Hare Krishna pilgrims to India 140; surveillance summary for 1975, 325; transfusion-induced 125; in Arkansas 125, California 125, 140, Georgia 140, New York 140, Pennsylvania 140, the United States 325, the United Kingdom in 1975, 118, Wales 118

Marburg-like virus: See African hemorrhagic fever

Measles: ACIP recommendations on use of vaccine 359, 376; atypical 245; reimmunization for 245; in Alaska 277, California 245, Ohio 50, Utah 196, Canada 399

Melioidosis: in Pennsylvania 419

Meningitis: See Meningococcal disease

Meningococcal disease: associated with alcoholics 123, 277, 341; caused by serogroup A 123, 277, 341; reactions to chemoprophylaxis 31; in Alaska 341, Oregon 123, 277, 341, Washington 123, 277, 341, Canada 123

Mercury exposure: associated with egg consumption 133; symptoms 133; in Washington 133

Milk shake machine: associated with copper poisoning 42

Minocycline: vestibular reaction to 31

MLNS: See Mucocutaneous lymph node syndrome

Monkeypox virus infection: in Africa 203

Morbidity statistics corrections: for Pennsylvania 251

Mucocutaneous lymph node syndrome: in District of Columbia 157, Tennessee 157, the United States 157

Mycobacterial infection: caused by *Mycobacterium chelonae* 238, *M. fortuitum* 238; wounds 238; in Colorado 243, North Carolina 238

National Influenza Immunization Program: See Influenza immunization program

***Neisseria gonorrhoeae*:** penicillinase-producing 261, 307

Nitrite poisoning: associated with monosodium glutamate 277; in California 277

Nosocomial infections: in Colorado 238, Illinois 110, North Carolina 238, Utah 141. See also Perspectives on the Control of Viral Hepatitis, Type B in listing of supplements

Orf: See Contagious ecthyma

P&I curve: See Influenza

Paralytic shellfish poisoning: cause of 384; in Alaska 383, Canada 347, worldwide 348

Parasitic Disease Drug Service: and treatment of *Pneumocystis pneumonia* 365

Patricia Murphy's Candlelight Restaurant: associated with typhoid fever outbreak 10

Penicillinase: produced by *Neisseria gonorrhoeae* 261, 307

Perspectives on control of viral hepatitis: See listing of supplements

Pentamidine: as treatment for *Pneumocystis pneumonia* 365

Pertussis: in Tennessee 149

PGF_{2α}: See Intraamniotic prostaglandin F_{2α}

Plague: associated with pack rat 155, pregnant woman 189, rabbit 155, squirrels 155, wilderness areas 253; bubonic 155; secondary pneumonic 155, 253; in Arizona 155, 189, 253, California 155, 253, Colorado 189, New Mexico 155, 189, 253, worldwide 291

***Pneumocystis carinii pneumonia*:** in Vietnamese orphans 15; treatment for 366

Pneumonia: and influenza curves 26, 47, 63, 73, 74, 92, 124, 391; explanation of 391, 392; caused by *Pneumocystis carinii* 15. See also American Legion

Poliomyelitis: caused by wild-type virus 331; in Germany 331

Potassium chloride: associated with bacteremia 109

Powassan virus: isolated from a patient with encephalitis 48; in New York 48

Psittacosis: associated with turkeys from Texas 301; in Nebraska 301

PSP: See Paralytic shellfish poisoning

Puerperal fever: See Streptococcal wound infection

Q fever: in Cyprus 131

Quarantine Measures: See Vaccination certificate requirements and Yellow fever vaccination centers

Rabies: ACIP recommendations for treatment of 403; associated with treatment failure 235; in animals 126, 317, humans 94, 126, 235, 317; in Maryland 235, Puerto Rico 94, 317, worldwide 317

Ramada Inn: associated with botulism 134

Recalls: of cheddar cheese 259, Copeland lenses 369, Dreher's cherry peppers 134, 148, pre-cooked beef roast 34

Relapsing fever: louse-borne 206, tick-borne 197, 292; in North Carolina 197, 292, Ohio 206

Respiratory disease: associated with American Legion convention 244, 251, 259, 267, 270, 284, 308

Rh hemolytic disease: in California 340, Connecticut 340, Illinois 340, Massachusetts 340, the United States in 1974, 339

RIG: See ACIP Recommendations

Rocky Mountain spotted fever: outbreak in household 341; in Georgia 341

Rubella: associated with Air Force recruits 156; in basic trainees 214, Japanese tourists 261; in Hawaii 261, Illinois 156, South Carolina 214, Texas 156, 299, United States in 1975, 41

St. Louis encephalitis: in Alabama 262, 294, Arizona 294, Arkansas 294, California 243, 262, 294, Indiana 294, Illinois 262, 294, Louisiana 262, 294, Maryland 294, Mississippi 243, 262, 294, Missouri 294, Ohio 262, 294, South Dakota 294, Tennessee 243, 262, 294, Texas 262, 294, Virginia 294, the United States in 1975, 116, the United States in 1976, 243, 262

Saline abortion: See Hypertonic saline

Salmonella meningitis: in New York 315

Salmonellosis: associated with aircraft 332, cheddar cheese 259, cooked lobster 229, cruise ship 229, 309, liver pâté 229, meningitis in an adult 315, milk 203, nursery 386, pre-cooked roast beef 34, 333, prime rib of beef or barbeque ribs 99, Spanish charter flights 64, turtles 332; caused by *Salmonella bovis-morbificans* 333, *S. brandenburg* 332, *S. bredeney* 386, *S. enteritidis* 309, 315, *S. heidelberg* 259, *S. london* 283, *S. saint-paul* 34, *S. senftenberg* 229, *S. thompson* 99, *S. typhimurium* 64, 187, *S. virchow* 203, *S. Wassenaar* 332; in Colorado 259, Connecticut 333, Delaware 333, Massachusetts 386, Minnesota 283, Nevada 99, New Jersey 34, 333, Oregon 99, Pennsylvania 333, Washington 99, Canada 332, Canary Islands 64, Finland 64, Federal Republic of Germany 64, France 332, United Kingdom in 1975, 123, 187, 203. See also Typhoid fever

Scabies: increased incidence of, in United States 10; treatment for 15

Schistosomiasis: caused by *Schistosoma haematobium* 118, *S. mansoni* 118; in the United Kingdom 118

Sepra: vs pentamidine as treatment for *Pneumocystis pneumonia* 365

Shigellosis: associated with home-catered Polynesian luau 302; caused by *Shigella flexneri* Type 2, 302; in Washington 302

Smallpox: ACIP recommendation on vaccination of hospital and health personnel 9; worldwide surveillance of 9, 91, 254, 324, 355. See also Vaccination certificate requirements

Smoking: survey 237

Snake bite: fatal 310, 324; in Florida 310, 324

Sporotrichosis: associated with Forestry Commission workers 227, sphagnum moss 227; in Mississippi 227

S/S Emerald Seas: enterotoxic *Escherichia coli* aboard 229

Staphylococcal food poisoning: associated with chicken at a church conference 131, eclairs 317, ham in boxed lunches 49; caused by *Staphylococcus aureus* 49, 317; in Florida 131, New York 317, North Carolina 49, Puerto Rico 317, South Carolina 49, Tennessee 49

Streptococcal wound infection: associated with anal carriage 141, hospital outbreak 141, vaginal carriage 141; caused by M-untypable T-28, 141; in Utah 141

Swine flu: summary of vaccine field trials for 357, vaccine usage 358. See also Influenza

Syphilis: CDC recommended treatment schedules for 1976, 101; in the United States in November 1975, 55; December 1975, 83; January 1976, 100; February 1976, 132; March 1976, 164; April 1976, 188; May 1976, 235; June 1976, 260; July 1976, 291; August 1976, 316; September 1976, 356; October 1976, 415

Tahki Imports, Ltd: associated with contaminated yarn 33

Tapeworm infection: caused by *Diphyllobothrium latum* 172; in Minnesota 172

Thelaziasis: caused by *Thelazia californiensis* 367; in California 367

Trichinosis: associated with bear meat 171, 393, chinese dumpling 393, ground beef 393, pork sausage 393, pork-beef sausage 393, venison-pork sausages 109, 393, walrus meat 393; in Alaska 393, California 171, 393, Connecticut 393, Illinois 393, Iowa 109, 393, Massachusetts 393, New Jersey 393, New York 393, Pennsylvania 393, Utah 393, United States in 1975, 393

Trimethoprim-sulfamethoxazole: as treatment for *Pneumocystis pneumonia* 366

Tuberculosis: associated with foreign-born 139, 180; in Maryland 93, Virginia 139, United States in 1974-1976, 286, in 1975, 75, 219, Canada in 1975, 180, 212

Turtles: associated with salmonellosis 332

Typhoid fever: associated with grandmother 334, New York City restaurant 10, 23, high school tour group 10, 23; interstate outbreak of 10, 23; in Arkansas 334, Connecticut 10, Massachusetts 10, 23, New Hampshire 10, New York 10

Vaccination certificate requirements: changes in cholera vaccination requirements in Afghanistan 236, Chad 24, Christmas Island 24, Guinea 48, 236, Guinea-Bissau 48, 236, Iraq 16, Italy 16, Kuwait 16, Macao 16, Mali 16, Pakistan 236, Papua 48, Qatar 76, Saint Helena 76, Saudi Arabia 236; changes in smallpox vaccination requirements in Americas 24, Belgium 24, Bulgaria 156, Canada 24, Canary Islands 24, Chile 367, Christmas Island 24, Costa Rica 236, Cuba 32, Finland 76, German Democratic Republic (East) 32, Israel 236, 284, Italy 16, 76, Jamaica 16, 76, Japan 315, 367, Jordan 16, Luxembourg 16, Mauritius 16, New Guinea 48, New Hebrides 236, New Zealand 48, 156, Oceania 24, Pakistan 48, 236, 284, Papua 48, Pitcairn Island 48, Saint Helena 76, Spain 76, Spanish Sahara 76, Sweden 76, Tobago 76, Trinidad 76, Trust Territory of the Pacific Islands 48, Union of Soviet Socialist Republics 76, Yugoslavia 76; changes in yellow fever vaccination requirements in American Samoa 76, Cuba 24, Egypt 32, Mozambique 16, Nigeria 48

Vaccines: See ACIP Recommendations, Influenza, Measles, Smallpox

Vietnamese orphans: and *Pneumocystis carinii* pneumonia 15

Western equine encephalitis: in Minnesota 116, North Dakota 116, the United States in 1975, 116

Yarn: associated with anthrax 33

Yellow fever vaccination centers: changes in Alabama 284, Alaska 107, California 107, 108, 284, Colorado 284, Connecticut 108, 284, Delaware 108, 284, District of Columbia 108, Florida 108, 284, Guam 48, 236, Idaho 108, Indiana 108, Iowa 108, Kansas 108, Kentucky 284, Massachusetts 108, Michigan 108, 284, Minnesota 284, Montana 108, New York 108, 156, 284, North Carolina 284, Ohio 108, 115, 284, Oklahoma 284, Pennsylvania 284, South Carolina 284, Tennessee 108, 292, Texas 115, 156, 292, Trust Territory of the Pacific Islands 48, Vermont 367, Virginia 115, 292, Washington 115, Wisconsin 292

ZIG: See Zoster immune globulin.

Zoster immune globulin: criteria necessary to release 86; history of patients treated with 211; shortage of 8, 86, 211

Table III-Continued
Cases of Specified Notifiable Diseases: United States
Weeks Ending January 1, 1977 and December 27, 1975 — 52nd Week

REPORTING AREA	TUBERCULOSIS		TULA- REMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (RMSF)		VENEREAL DISEASES (Civilian Cases Only)						RABIES IN ANIMALS
	1976	CUM. 1976	CUM. 1976	1976	CUM. 1976	1976	CUM. 1976	1976	GONORRHEA		SYPHILIS (Pri. & Sec.)		CUM. 1976	
									1976	1975	1976	CUMULATIVE 1976 1975		
UNITED STATES	591	32,549	146	4	384	5	892	13,386	996,468	992,483	307	23,499	25,392	2,887
NEW ENGLAND	43	1,150	1	-	26	-	9	466	28,450	28,029	13	837	839	75
Maine*	2	76	-	-	-	-	-	45	2,345	2,248	-	22	35	38
New Hampshire	4	50	-	-	2	-	-	12	857	712	-	10	16	1
Vermont	1	36	-	-	1	-	-	7	704	707	1	10	7	-
Massachusetts	27	675	1	-	16	-	4	201	13,559	13,039	9	611	550	26
Rhode Island	1	83	-	-	-	-	3	74	2,065	2,141	-	19	23	5
Connecticut	8	230	-	-	7	-	2	127	8,920	9,182	3	165	208	5
MIDDLE ATLANTIC	73	5,859	3	-	67	3	81	1,586	115,357	113,598	56	3,893	4,603	71
Upstate New York	-	945	2	-	9	-	34	174	18,710	20,587	14	257	401	17
New York City	NA	2,192	1	-	36	-	5	744	50,800	47,016	20	2,407	2,721	-
New Jersey*	35	1,221	-	-	13	-	13	352	17,929	17,033	12	582	720	31
Pennsylvania	38	1,501	-	-	9	3	29	316	27,918	28,962	10	647	761	23
EAST NORTH CENTRAL ..	113	4,728	3	-	43	-	23	1,746	158,227	165,325	18	2,135	2,083	187
Ohio	52	946	1	-	12	-	18	510	39,770	46,102	4	495	517	34
Indiana	9	515	-	-	4	-	-	140	15,590	14,008	4	113	151	24
Illinois	18	1,648	2	-	14	-	-	376	53,791	57,880	3	1,175	1,001	29
Michigan*	21	1,349	-	-	10	-	5	522	34,667	31,573	3	240	334	7
Wisconsin	13	270	-	-	3	-	-	198	14,409	15,762	4	112	80	93
WEST NORTH CENTRAL ..	39	1,222	36	-	21	-	28	567	52,512	50,283	6	464	642	727
Minnesota	10	220	3	-	11	-	-	132	9,289	9,994	2	104	115	187
Iowa	-	116	1	-	1	-	3	18	6,372	7,219	-	44	93	132
Missouri*	13	591	28	-	5	-	15	170	21,015	18,416	1	180	280	72
North Dakota	5	39	-	-	-	-	-	19	846	799	-	-	5	136
South Dakota*	5	62	1	-	1	-	3	24	1,571	1,901	-	6	5	117
Nebraska	3	56	-	-	2	-	-	121	4,501	4,425	-	45	19	16
Kansas*	3	138	3	-	1	-	7	83	8,918	7,529	3	85	125	67
SOUTH ATLANTIC	94	6,850	16	-	48	1	432	3,621	238,854	241,330	95	6,732	7,684	431
Delaware	2	75	-	-	-	-	1	42	3,380	3,445	-	65	88	21
Maryland	11	933	1	-	5	-	21	482	31,554	29,696	-	515	568	11
District of Columbia ..	3	314	-	-	2	-	-	86	13,320	13,996	4	580	679	-
Virginia	7	998	8	-	6	-	100	419	24,701	23,594	28	703	597	56
West Virginia	7	272	-	-	5	-	8	36	3,162	3,150	1	23	57	15
North Carolina*	24	1,258	3	-	2	1	193	630	35,800	34,642	5	1,171	1,040	15
South Carolina	4	501	1	-	5	-	50	456	22,781	22,474	8	381	541	5
Georgia	24	869	2	-	4	-	56	1,018	46,489	45,238	17	826	1,056	220
Florida	12	1,630	1	-	19	-	3	452	57,667	65,095	32	2,468	3,058	88
EAST SOUTH CENTRAL ..	40	2,783	21	1	16	1	170	1,404	87,717	83,283	15	903	1,163	132
Kentucky	9	577	1	-	6	-	40	178	11,478	10,765	1	121	169	63
Tennessee	3	910	20	-	8	1	95	505	35,194	32,916	3	306	434	48
Alabama	15	820	-	-	1	-	15	595	24,482	23,250	-	188	270	21
Mississippi	13	476	-	1	1	-	20	126	16,563	16,352	11	288	290	-
WEST SOUTH CENTRAL ..	43	3,874	49	-	18	-	139	760	124,910	121,287	14	2,821	2,289	648
Arkansas*	8	484	27	-	5	-	21	70	11,949	13,261	1	103	71	152
Louisiana	-	609	3	-	3	-	-	500	18,346	20,812	13	580	530	7
Oklahoma	6	378	9	-	1	-	97	190	12,315	11,963	-	94	93	171
Texas	29	2,403	10	-	9	-	21	-	82,300	75,251	-	2,044	1,595	318
MOUNTAIN	30	929	5	-	22	-	4	757	39,280	40,271	8	604	577	196
Montana*	2	52	2	-	2	-	1	18	2,019	2,074	1	14	7	86
Idaho	1	33	-	-	1	-	1	21	2,163	2,094	1	24	16	-
Wyoming	-	20	1	-	-	-	-	10	836	974	-	12	10	1
Colorado	-	148	1	-	7	-	1	184	10,416	10,930	3	163	102	53
New Mexico	8	177	-	-	2	-	1	131	7,177	7,076	-	136	158	4
Arizona	13	405	-	-	9	-	-	199	11,463	10,557	-	205	207	31
Utah	6	54	1	-	1	-	-	83	2,344	2,516	3	23	19	21
Nevada	-	40	-	-	-	-	-	111	2,862	4,050	-	27	58	-
PACIFIC	116	5,154	12	3	123	-	6	2,479	151,161	149,077	82	5,110	5,512	420
Washington*	31	431	2	-	5	-	3	NA	12,448	13,428	NA	146	210	8
Oregon	2	203	1	-	1	-	-	182	10,553	11,265	-	109	153	11
California	69	3,773	9	3	111	-	3	2,158	120,544	118,309	82	4,732	5,087	357
Alaska	4	94	-	-	-	-	-	64	4,342	3,679	-	29	7	44
Hawaii	10	653	-	-	6	-	-	75	3,274	2,396	-	94	55	-
Guam*	-	49	-	-	1	-	-	-	315	402	-	2	17	-
Puerto Rico	-	375	-	-	2	-	-	26	2,461	2,892	9	568	711	40
Virgin Islands	NA	6	-	NA	-	NA	-	NA	219	227	NA	52	45	-

NA: Not available

*Delayed reports: TB: Ohio delete 8, Mich. delete 4, Kans. delete 2, N.C. delete 3, Ark. delete 1, Guam add 2; Tularemia: Mo. delete 1; RMSF: N.J. add 1; GC: Me. add 45, Wash. delete 109, Guam add 8, S. Dak. delete 1 mil; Syphilis: Mont. delete 1, Wash. add 8 civ., add 1 mil; An. rabies: S. Dak. add 12

Table IV
Deaths in 121 United States Cities*
Week Ending January 1, 1977 - 52nd Week

REPORTING AREA	ALL CAUSES					Pneumonia and Influenza ALL AGES	REPORTING AREA	ALL CAUSES					Pneumonia and Influenza ALL AGES
	ALL AGES	65 Years and Over	45-64 Years	25-44 Years	Under 1 Year			ALL AGES	65 Years and Over	45-64 Years	25-44 Years	Under 1 Year	
NEW ENGLAND	727	479	186	23	18	38	SOUTH ATLANTIC ...	1,029	601	291	62	44	42
Boston, Mass.	198	121	59	3	7	13	Atlanta, Ga.	83	42	23	13	-	1
Bridgeport, Conn.	36	20	14	-	1	2	Baltimore, Md.	156	86	49	9	8	1
Cambridge, Mass.	29	24	3	-	-	4	Charlotte, N. C.	83	44	22	7	7	2
Fall River, Mass.	36	33	3	-	-	-	Jacksonville, Fla.	83	60	13	4	4	7
Hartford, Conn.	73	40	25	3	4	2	Miami, Fla.	83	47	31	1	-	4
Lowell, Mass.	37	21	14	2	-	-	Norfolk, Va.	31	19	9	-	3	1
Lynn, Mass.	18	15	2	1	-	-	Richmond, Va.	76	42	25	6	3	6
New Bedford, Mass.	25	22	2	1	-	-	Savannah, Ga.	35	23	9	1	2	5
New Haven, Conn.	48	33	10	2	1	2	St. Petersburg, Fla.	84	70	10	1	2	2
Providence, R.I.	59	33	20	2	3	3	Tampa, Fla.	76	47	22	3	2	5
Somerville, Mass.	6	1	2	2	-	-	Washington, D. C.	203	102	66	15	12	7
Springfield, Mass.	54	41	8	3	-	4	Wilmington, Del.	36	19	12	2	1	1
Waterbury, Conn.	33	20	9	1	1	3							
Worcester, Mass.	75	55	15	3	1	5							
MIDDLE ATLANTIC ...	2,884	1,862	702	173	74	139	EAST SOUTH CENTRAL ...	635	359	173	39	29	29
Albany, N. Y.	51	30	16	2	-	2	Birmingham, Ala.	83	42	24	7	2	2
Allentown, Pa.	26	16	6	2	1	-	Chattanooga, Tenn.	55	38	13	3	1	3
Buffalo, N. Y.	107	71	27	6	2	7	Knoxville, Tenn.	45	33	9	1	-	-
Camden, N. J.	31	17	12	1	-	-	Louisville, Ky.	107	60	28	7	5	8
Elizabeth, N. J.	26	16	9	1	-	-	Memphis, Tenn.	157	81	50	9	8	4
Erie, Pa.	38	25	9	2	2	2	Mobile, Ala.	42	26	10	3	-	-
Jersey City, N. J.	60	44	8	5	1	1	Montgomery, Ala.	44	29	10	3	-	4
Newark, N. J.	58	32	15	8	3	4	Nashville, Tenn.	102	50	29	6	13	8
New York City, N. Y. ...	1,513	981	348	100	38	60	WEST SOUTH CENTRAL ...	1,013	580	289	59	43	24
Paterson, N. J.	40	23	8	4	3	3	Austin, Tex.	44	27	12	2	-	5
Philadelphia, Pa.	296	190	75	18	6	24	Baton Rouge, La.	45	27	11	4	2	1
Pittsburgh, Pa.	213	123	70	12	7	16	Corpus Christi, Tex.	19	9	8	2	-	-
Reading, Pa.	39	25	11	2	-	-	Dallas, Tex.	171	95	45	13	10	6
Rochester, N. Y.	129	89	33	2	3	14	El Paso, Tex.	54	32	19	2	-	3
Schenectady, N. Y.	35	26	7	1	-	-	Fort Worth, Tex.	72	44	23	3	1	-
Scranton, Pa.	47	38	7	1	1	-	Houston, Tex.	205	111	71	13	3	3
Syracuse, N. Y.	97	59	23	4	6	1	Little Rock, Ark.	52	29	15	4	4	-
Trenton, N. J.	34	25	9	-	-	2	New Orleans, La.	151	72	45	9	17	-
Utica, N. Y.	19	15	3	1	-	1	San Antonio, Tex.	99	59	22	6	5	1
Yonkers, N. Y.	25	17	6	1	1	2	Shreveport, La.	39	30	7	-	1	4
							Tulsa, Okla.	62	45	11	1	-	1
EAST NORTH CENTRAL ...	2,298	1,354	631	165	58	51	MOUNTAIN	558	340	143	29	25	24
Akron, Ohio	48	26	16	2	3	-	Albuquerque, N. Mex. ...	55	25	19	4	3	6
Canton, Ohio	53	29	19	2	-	2	Colorado Springs, Colo.	29	23	5	-	-	3
Chicago, Ill.	594	304	177	65	20	5	Denver, Colo.	138	91	32	10	-	5
Cincinnati, Ohio	110	81	20	4	4	3	Las Vegas, Nev.	28	14	9	2	-	1
Cleveland, Ohio	146	91	43	9	1	3	Ogden, Utah	31	13	9	2	4	2
Columbus, Ohio	135	82	35	10	1	2	Phoenix, Ariz.	125	81	28	5	8	1
Dayton, Ohio	99	62	21	6	1	3	Pueblo, Colo.	38	25	11	1	-	5
Detroit, Mich.	312	173	84	31	12	5	Salt Lake City, Utah ...	50	25	15	3	6	1
Evansville, Ind.	50	29	18	2	-	2	Tucson, Ariz.	64	43	15	2	4	-
Fort Wayne, Ind.	42	20	16	3	3	3							
Gary, Ind.	27	15	8	-	3	2	PACIFIC	1,775	1,119	439	100	58	43
Grand Rapids, Mich.	69	49	16	1	-	7	Berkeley, Calif.	19	17	1	-	-	-
Indianapolis, Ind.	168	110	39	10	3	2	Fresno, Calif.	54	29	14	5	3	1
Madison, Wis.	22	13	6	3	-	1	Glendale, Calif.	43	31	9	3	-	1
Milwaukee, Wis.	109	78	24	2	3	-	Honolulu, Hawaii	49	25	14	7	2	1
Peoria, Ill.	20	15	4	1	-	-	Long Beach, Calif.	114	79	28	4	1	2
Rockford, Ill.	41	22	12	4	-	3	Los Angeles, Calif.	577	375	130	41	16	13
South Bend, Ind.	64	38	20	1	2	5	Oakland, Calif.	77	50	20	1	3	2
Toledo, Ohio	124	77	34	5	2	3	Pasadena, Calif.	31	29	1	1	-	1
Youngstown, Ohio	65	40	19	4	-	-	Portland, Oreg.	158	98	46	7	2	5
WEST NORTH CENTRAL ...	743	472	174	35	34	23	Sacramento, Calif.	60	37	15	3	1	1
Des Moines, Iowa	53	38	10	2	3	-	San Diego, Calif.	113	65	30	5	6	3
Duluth, Minn.	26	18	6	1	1	1	San Francisco, Calif.	176	100	49	12	8	-
Kansas City, Kans.	33	23	8	-	-	-	San Jose, Calif.	55	31	16	5	1	2
Kansas City, Mo.	150	100	35	7	7	5	Seattle, Wash.	155	85	45	4	13	3
Lincoln, Nebr.	39	26	7	3	1	2	Spokane, Wash.	51	35	13	2	1	6
Minneapolis, Minn.	97	58	24	9	2	3	Tacoma, Wash.	43	33	8	-	1	2
Omaha, Nebr.	53	40	10	-	2	2							
St. Louis, Mo.	198	108	56	8	11	4	TOTAL	11,662	7,166	3,028	685	383	413
St. Paul, Minn.	61	42	9	2	7	3	Expected Number	12,398	7,598	3,202	768	413	475
Wichita, Kans.	33	19	9	3	-	3							

*By place of occurrence and week of filing certificate. Excludes fetal deaths.

† Estimate based on average percent of divisional total

The Morbidity and Mortality Weekly Report, circulation 52,000, is published by the Center for Disease Control, Atlanta, Georgia. The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Send reports to: Center for Disease Control, Attn.: Editor, Morbidity and Mortality Weekly Report, Atlanta, Georgia 30333.

Send mailing list additions, deletions, and address changes to: Center for Disease Control, Attn.: Distribution Services, GSO, 1-SB-36, Atlanta, Georgia 30333. When requesting changes be sure to give your former address, including zip code and mailing list code number, or send an old address label.

*Hepatitis — Continued***Subdeterminants of Hepatitis B Surface Antigen:**

HBsAg carries a common determinant *a* and a number of major subdeterminants, which are coded by the virus genome and not by the host. The subdeterminants can be demonstrated by the developments of "spurs" in immunodiffusion tests with appropriate reagents. Eight distinct categories and 2 categories of mixed subtypes have been recognized. These consist of various combinations of the subdeterminants *d*, *y*, *w*, and *r*, and in addition, other variants originally described as being related to the common determinant *a*, but better designated as variants of the specificity *w* since they always behave as alleles of *r*.

TABLE 1. *Hepatitis nomenclature*

New Nomenclature	Old Nomenclature
ayw1	(a ₁ yw)
ayw2	(a ₂ ¹ yw)
ayw3	(a ₂ ³ yw)
ayw4	(a ₃ yw)
ayr	ayr
adw2	(a ₂ ¹ dw)
adw4	(a ₃ dw)
adr	adr
adyw	adyw
adyr	adyr

The major subdeterminants behave as though they comprise 2 allelic groups: *d* and *y*, on the one hand, and *w1*, *w2*, *w3*, *w4*, and *r* on the other.

However, these systems are probably not completely independent, since only 2 of the 4 variants of *w* (found with *y*) have been demonstrated with *d*. The 2 mixed subtype categories are rare and may possibly result from

Current Trends

Results of Screening for Gonorrhea — United States 12-Month period Ending June 30, 1976

In the 12-month period ending June 30, 1976, a total of 9,109,264 specimens were taken from women as part of

phenotypic or genotypic mixing of determinants during simultaneous infection with viruses associated with more than 1 subtype of HBsAg.

Other surface antigenic reactivities, such as *q*, *x*, *f*, *t*, *j*, *n*, and *g*, have also been described. The necessary serological comparisons between these antigenic reactivities have not yet been made.

Subdeterminants of Hepatitis B e Antigen:

Two antigens have been identified which are designated HBeAg/1 and HBeAg/2.

Hepatitis A Virus

HAV Hepatitis A virus is a small virus in the range of 25 to 28 nm possessing cubic symmetry. As with other viruses of this size, empty particles also exist. Both full and empty particles are identified by immune electron microscopy. Other serological tests for hepatitis A virus include complement fixation, immune adherence, hemagglutination, and radioimmunoassay.

Anti-HAV Antibody to hepatitis A virus.

Other Hepatitis Viruses

A newly recognized form of hepatitis has become evident. It is indistinguishable clinically from hepatitis type A or type B infection but is antigenically unrelated to either type. It is now the most common form of hepatitis occurring after blood transfusion in some areas. Secondary cases appear to be uncommon. In addition, sporadic cases of hepatitis occur which are also unrelated to hepatitis A or B viruses. No laboratory tests are as yet available for identifying the agents or antigens associated with this new form of hepatitis.

Reported by the World Health Organization in the Weekly Epidemiological Record 51(48):365-366, 1976.

Results of Gonorrhea Culture Tests on Females — United States*
July 1975 — June 1976

REPORTING SOURCE	NUMBER TESTED	NUMBER POSITIVE	PERCENT POSITIVE	REPORTING SOURCE	NUMBER TESTED	NUMBER POSITIVE	PERCENT POSITIVE
Health Care Providers (Excluding VD Clinics)	8,223,555	225,780	2.7	Health Care Providers (Excluding VD Clinics—Con't.)			
Health Department Non-VD Clinic	1,842,571	56,973	3.1	Private Physicians	2,377,977	47,005	2.0
Family Planning	1,320,750	40,537	3.1	Private Family Planning Groups	459,206	15,452	1.6
Prenatal, Ob-Gyn	193,603	5,419	2.8	Group Health Clinics	137,181	2,813	2.1
Cancer Detection	28,204	319	1.1	Student Health Centers	228,454	3,965	1.7
Combinations or Other	300,014	10,698	3.6	Manpower Training Agencies	15,905	755	4.7
Public/Private Hospital—Outpatient	1,530,372	64,440	4.2	Industrial Screening	4,214	118	2.8
Family Planning	217,982	6,590	3.0	Military/Dependents	101,255	2,087	2.1
Prenatal, Ob-Gyn	332,235	10,477	3.2	Correctional or Detention Centers	49,229	2,597	5.3
Cancer Detection	21,547	620	2.9	Not Specified	130,105	3,983	3.1
Combinations or Other	958,608	46,753	4.9	Venereal Disease Clinics	885,709	167,877	18.0
Public/Private Hospital—Inpatient	67,288	1,889	2.8				
Obstetric	5,286	136	2.6				
Gynecologic	891	24	2.7				
Combinations or Other	61,111	1,729	2.8				
Community Health Centers	779,798	23,703	3.0				
Family Planning	283,868	5,341	1.9				
Prenatal, Ob-Gyn	48,861	1,047	2.1				
Cancer Detection	10,772	73	.7				
Combinations or Other	436,297	17,242	4.0				
				TOTAL (All Clinics)	9,109,264	383,657	4.3

*Excludes Vermont (July-December 1975), Iowa (July-September 1975), Trust Territories (October-December 1975 and April-June 1976), Indianapolis (January-March 1976) and Rhode Island (January-March 1976)
Source: CDC 9,124, CDC, Venereal Disease Control Division, Atlanta, Georgia

(Continued on page 430)

Gonorrhea — Continued

ing by the types of health care facilities securing the specimens. Although the positivity rates were highest (19.0%) in venereal disease clinics, 90% of all tests were performed in other settings. In these settings culture positivity rates in women ranged from 1.6% among private family planning groups to 5.3% for women in detention centers. Among 2,377,977 women tested by private physicians, cultures from 47,005 (2.0%) were positive.

*Epidemiologic Notes and Reports***Follow-up on Guillain-Barré Syndrome — United States**

Forty-seven states have reported a total of 571 cases of Guillain-Barré syndrome (GBS) to CDC in the period September 26-December 31, 1976 (Table 2). There have been 291 cases in influenza vaccine recipients (4 of whom received influenza Type B vaccine only) and 261 cases in non-recipients. The vaccine status for 18 cases is unknown. Differential attack rates show a relative risk remaining between 8 to 14 for vaccinees.

The U.S. Public Health Service Advisory Committee on Immunization Practices (ACIP) met at CDC December 29 to review data on neurological complications following influenza vaccine. The Committee concluded that there was an apparent association between influenza vaccination and neurological complication (specifically GBS) but that the extent of the risk of such complications could not yet be determined.

Provisional data indicate that an additional 3,741,749 women were tested at all types of facilities in July-November 1976, or about 748,000 per month. For this period, the overall positivity rate of cultures from all sources was 4.8%.

Reported by Venereal Disease Control Div, Bur of State Services, CDC.

Because of this apparent association and because there is presently no evidence suggesting an imminent influenza epidemic, the ACIP recommended that the moratorium on all influenza vaccination (with monovalent A, monovalent B, and bivalent A vaccines) be continued and that complete data on neurological complications (including GBS) following vaccination be collected. Should surveillance data indicate epidemic influenza, this position would be reconsidered. The ACIP also suggested that CDC prepare a consent form specifically outlining what is known about the risks of neurological complications following influenza vaccination for use by physicians who may wish to immunize high-risk patients after their careful assessment of the risks and benefits.

Reported by National Influenza Immunization Program; Viral Diseases Div. Bur of Epidemiology, CDC.

TABLE 2. Reports of Guillain-Barré syndrome by state and vaccination status, United States, September 26-December 31, 1976.

State	Reported Cases	Vaccinated	Nonvaccinated	Received B Vaccine Only	Unknown	State	Reported Cases	Vaccinated	Nonvaccinated	Received B Vaccine Only	Unknown
Alabama	12	10	2	0	0	Montana	2	2	0	0	0
Alaska	5	5	0	0	0	Nebraska	5	4	1	0	0
Arizona	6	6	0	0	0	New Hampshire	4	2	2	0	0
Arkansas	4	2	2	0	0	New Jersey	29	8	20	1	0
California	63	15	43	0	5	New Mexico	7	2	3	0	2
Colorado	13	8	5	0	0	New York	28	11	17	0	0
Connecticut	16	10	6	0	0	North Carolina	10	3	7	0	0
Delaware	1	0	1	0	0	North Dakota	3	3	0	0	0
Florida	20	13	5	2	0	Ohio	25	16	7	0	2
Georgia	14	8	6	0	0	Oklahoma	7	2	5	0	0
Hawaii	3	1	2	0	0	Oregon	10	7	3	0	0
Idaho	3	2	1	0	0	Pennsylvania	25	20	2	0	3
Illinois	9	3	6	0	0	Rhode Island	3	2	1	0	0
Indiana	14	4	9	0	1	South Carolina	5	0	4	0	1
Iowa	10	5	5	0	0	South Dakota	3	3	0	0	0
Kansas	11	8	3	0	0	Tennessee	19	9	10	0	0
Kentucky	12	6	6	0	0	Texas	11	1	9	0	1
Louisiana	4	1	3	0	0	Utah	8	6	2	0	0
Maryland	18*	14	3	0	0	Vermont	4	3	1	0	0
Massachusetts	10	3	6	1	0	Virginia	15	9	6	0	0
Michigan	26	17	8	0	1	Washington	14	5	9	0	0
Minnesota	18	13	5	0	0	Wisconsin	22	12	8	0	2
Mississippi	10	1	9	0	0	Wyoming	1	0	1	0	0
Missouri	9	2	7	0	0	Total	571	287	261	4	18

*Includes 1 case vaccinated with 1975-1976 vaccine formulation

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE / CENTER FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333

Director, Center for Disease Control, David J. Sencer, M.D.
Director, Bureau of Epidemiology, Philip S. Brachman, M.D.
Editor, Michael B. Gregg, M.D.
Managing Editor, Anne D. Mather, M.A.

OFFICIAL BUSINESS FIRST CLASS



POSTAGE AND FEES PAID
U.S. DEPARTMENT OF HEW
HEW 399